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FROM Mrs. DESSA O. Clinton

ATTENTION Mr Michael Brown

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Call Ms. Clinton

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July 19, 2002

Dessa O. Clinton
200 Peale Court
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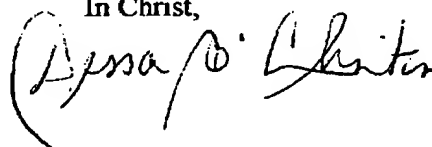
Dear Patent Examiner:
Attn: Mr. Michael Brown

Thank you for enabling me to understand the details of the patent process. Your efforts and cooperation you have shown me regarding my petition for patent the (IV Sleeve), has truly demonstrated your commitment to excellence. I read an article some months ago about the U.S. Patent and Trademark Office in (U. S. News, June 2002); whereas, the writer expressed concerns, such as, under staffing, pay not equal to performance, errors during patent evaluations, etc.

Nonetheless, your diligence and dedication to service, using a people first approach should certainly be commended. Enclosed you will find the work requested that highlights the detail actions taken, referencing the (IV Sleeve) patent application. After your review, if further action is warranted, please grant me an extension in order to fully comply with established standards, and or guidelines.

I have attempted to address all areas cited in detail. Again, I thank you for providing such exceptional customer service. I can be reached at home (210) 566-2810, or cell (210) 601-0962. I look forward to hearing from you soon.

In Christ,

A handwritten signature in cursive script, appearing to read "Dessa O. Clinton".

TITLE OF INVENTION

I.V. Sleeve

An open ended elasticized sleeve with banded support, tubular in shape, designed to encompass, protect, retain, and compress body member.

CROSS REFERENCE TO RELATED APPLICATIONS

U.S. Patent Documents

<u>3416518</u>	Dec., 1968	Samuels	602/3.
<u>5143762</u>	Sep., 1992	Ho	128/846.
<u>5228851</u>	Jul., 1993	Burton	604/171.
<u>5592953</u>	Jan., 1997	Delao	602/3.
<u>2169203</u>	Aug., 1939	Hinchliff	66/178.
<u>2704069</u>	Mar., 1955	Donelan	128/881.
<u>4016027</u>	Apr., 1977	Kintanar	2/159.
<u>4133624</u>	Jan., 1979	Heavner et al.	425/275.
<u>4287608</u>	Sep., 1981	Meyer	2/16.
<u>4315504</u>	Feb., 1982	Drennan	128/881.
<u>4646727</u>	Mar., 1987	Chambers	128/882.
<u>4856112</u>	Aug., 1989	Effle	2/59.
<u>4926851</u>	May., 1990	Bulley	128/157.
<u>4971233</u>	Nov., 1990	Keenan	223/111.
<u>4991593</u>	Feb., 1991	LeVahn	128/856.

<u>5016648</u>	May., 1991	Brown	128/879.
<u>5063919</u>	Nov., 1991	Silverberg	602/3.
<u>5187813</u>	Feb., 1993	Klein	2/16.
<u>5357633</u>	Oct., 1994	Rael	2/16
<u>3747374</u>	July, 1973	Meyer	66/195.
<u>4470410</u>	Sep., 1984	Elliott	128/DIG.
<u>5344406</u>	Sep., 1994	Spooner	128/879.
<u>5592953</u>	Jan., 1997	Delao	128/882.

BACKGROUND OF THE INVENTION

1. Field of Invention

The invention relates to a form fitting open ended tubular sleeve used primarily in securing an intravenous device to a patient's body member, and more particular, an elastic sleeve with two open ends that is supported by a plurality of bands that prohibit such elastic material from failing due to puncture or stress. The intravenous device is held between the sleeve and body. The elasticity and support of sleeve is such that it can stretch to 3 times its relaxed state therefore allowing a single size to fit an extremely wide weight and size range while maintaining its ability to provide substantial tension and integrity. In addition to securing the motion of an intravenous device the elastic material secures the site from liquid, solid and airborne contaminants.

2. Description of Prior Art

Presently the prior art configurations do not address structural integrity. The previous art fails to address the concerns of a single unit capable of securing an intravenous device while simultaneously protecting against the entry or release of contaminants and maintaining the structure integrity in the event of puncture or failure.

There have been many elastic devices designed for the protection of body extremities and appendages. Some protected medical sites from contamination of water, dirt and hazardous materials while others secure and stabilizing intravenous devices. The suggestion of an elastic sleeve, bag or glove like device with sealable or elasticized ends presently exists with all of the following patents. 5357633, 5187813, 5063919, 5016648, 4991593, 4971233, 4926851, 4856112, 4646727, 4315504, 4287608, 4133624, 4016027, 2704069, 2169203, 5592953, 5228851, 5143762, 3416518, 3747374, 4470410, 5344406, 5592953.

Each of the prior art products although being able to protect extremities from either contaminants or capable of securing an intravenous device are failing to meet one of four medical needs. When a sleeve or glove device is manufactured from a plastic yarn knitted to create an elastic fabric, the fabric ventilates the site and loses its ability to keep the medical site water or contaminant proof. A problem as well exists with a woven fabrics ability to fit an extremity with wide weight and size range. Previous art includes devices made from elastic film material (latex, silicone) that secure the site from contaminants. The device is form fitting and constrict tightly around the site in order to secure an intravenous device, but the problem that exists is that structural integrity is not dealt with and in the event of a puncture from an

intravenous needle or other sharp or hard item present at hand during the application of the sleeve or glove like item. Even the slightest damage to an elastic film type material under elastic stress causes severe damage. The fabric, film or material elastic or not must be thin enough to allow visual inspection of the site, yet strong enough to secure an intravenous device. This creates a problem when the elastic film (latex, silicone) is stretched. Elastic product even though capable of providing substantial tension are often punctured or pinched because of their thinning wall properties. As the fabric stretches the fabric thickness decreases and begins to limit its capacity of maintaining its own integrity and that of the site. Once the film is punctured or pinched it rapidly tears until it relieves its elastic load therefore rendering the sleeve or glove entirely useless in securing the body member.

In overcoming the problems and limitations of previous art, it is an object of this present invention to address all concerns in one invention by not only holding stable to a body member an intravenous device with an elasticized sleeve, but as well protecting such medical site or body member from pollutants, liquid, solid and airborne from entering or leaving the body member while solving the problem of structural integrity when the sleeve is under load.

BRIEF SUMMARY OF THE INVENTION

Below is a brief summary of the invention in order to solve the forgoing problems and achieving the forgoing and other objects, benefits, and advantages in accordance with the purpose of the present invention as embodies and broadly described herein.

Two initial aspects of the invention are defined as a method of protecting, stabilizing and securing an intravenous device to a patients body member involving a tubular sleeve

made of elastic film or membrane having two open ends. Inserting a body member through the sleeve so that the sleeve encircles and is elastically and firmly retained on the body member in such a way that said body member is protected against the entry and exit of liquids, solids and airborne pollutant while firmly holding the intravenous device.

A third aspect of the invention is to provide an banding apparatus and method to prohibit an overloaded, punctured or pinched elastic film or membrane from rupturing when placed under elastic load.

The fourth aspect of the invention is to provide an apparatus that is highly flexible as to comfortable fit a wide weight and size range while maintaining its ability to provide substantial tension and integrity.

BRIEF DISCRIPTION OF THE DRAWINGS

FIG. 1 Elasticized sleeve with openings at both ends.

FIG. 2 View of sleeve on arm with intravenous device.

FIG. 3 Enlarged view of Fig. 2 showing elasticized bands on sleeve.

FIG. 4 Enlarged view of Fig. 1 showing elastic band sealing open end.

FIG. 5 Enlarged view of Fig. 4 showing band 8.

FIG. 6 Pinch and folding procedure of fabric in order to create band 8.

DETAILED DISTCRPTION OF INVENTION

The invention relates to a skintight elastic sleeve that is reinforced with elastic bands 8 throughout its entire circumference and length as seen in Fig. 1. To be fitted onto

appendages, extremities, neck or thorax for achieving complete site compression, protection, and for maintenance of integrity of a medical site or intravenous equipment 9. Whereas the sleeve body 1 and bands 8 are manufactured from a group of elastic, pliable and expandable materials singularly and in combination such as rubber, latex, silicone, Gore-Tex, epidermal tissue, smooth muscle tissue, plastic and plastic components that are capable of expanding to 3 times its original state.

The sleeve is cylindrical in shape with an opening at both ends 6 and 7. The body of the sleeve 1 shall be of sufficient thickness ^{1 mm} (.05 mm – ^{2 mm} 5 mm) to protect the medical site while maintaining sufficient transparency to view such site without the need to remove the sleeve. The bands 8 around the sleeve shall be of the identical material used in manufacturing the body 1 of the sleeve so to facilitate the manufacturing process. The body 1 of sleeve and band 8 are of identical diameter and elasticity so as to apply sufficient force for sealing the sleeve end 6 and 7 without inhibiting circulation. Multiple bands 8 are fitted throughout the circumference and entire length of sleeve separated by a distance of ^{ok} 2.54 cm. (1 inch) from each other as seen in Fig. 3. As an example: If the length of the sleeve was 25.40 cm (10 inches) then there would be a total of 11 bands. First band 8 would initiate at end 6. The second band would be 2.54 cm (1 inch) from the first and each consecutive band would be 2.54 cm from the previous until the final and eleventh band terminated on end 7. If the length of the sleeve was 20 inches then there would be twice as many bands 8. Band 8, Fig. 4, end 6 and 7 are manufactured by ^{NW} creating a lip 9 and ^{NW} folding 1 cm of the sleeves body 1 upon itself and ^{NW} adhering it with either heat or an elastic adhesive. The bands 8 between the ends 6 and 7 are manufactured

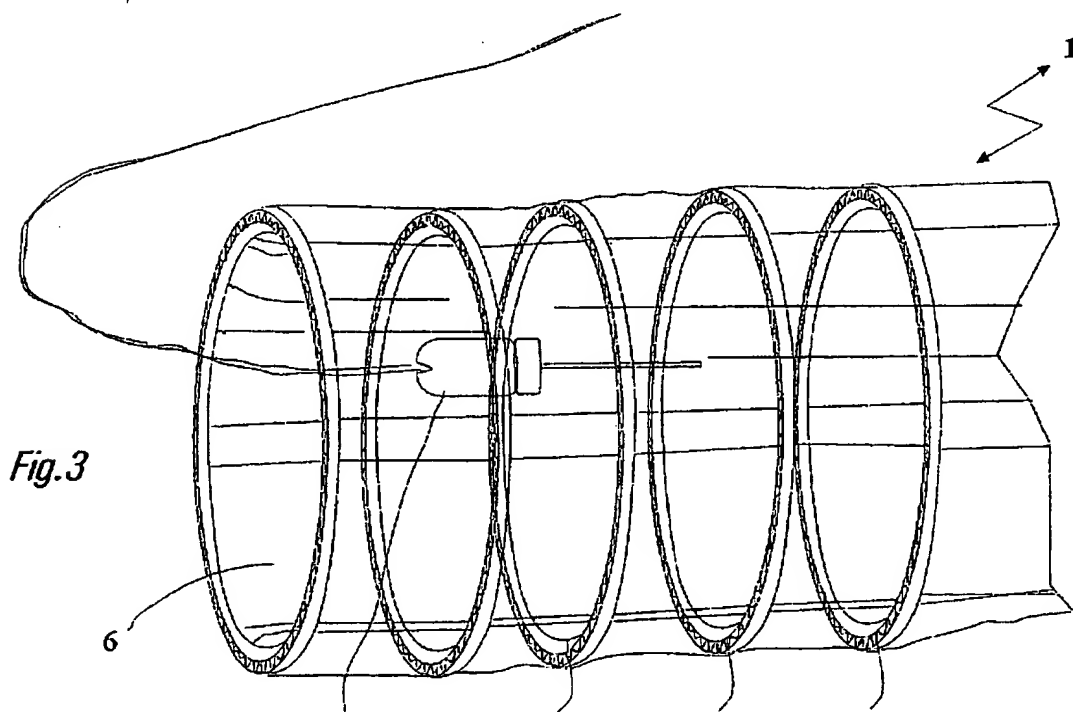
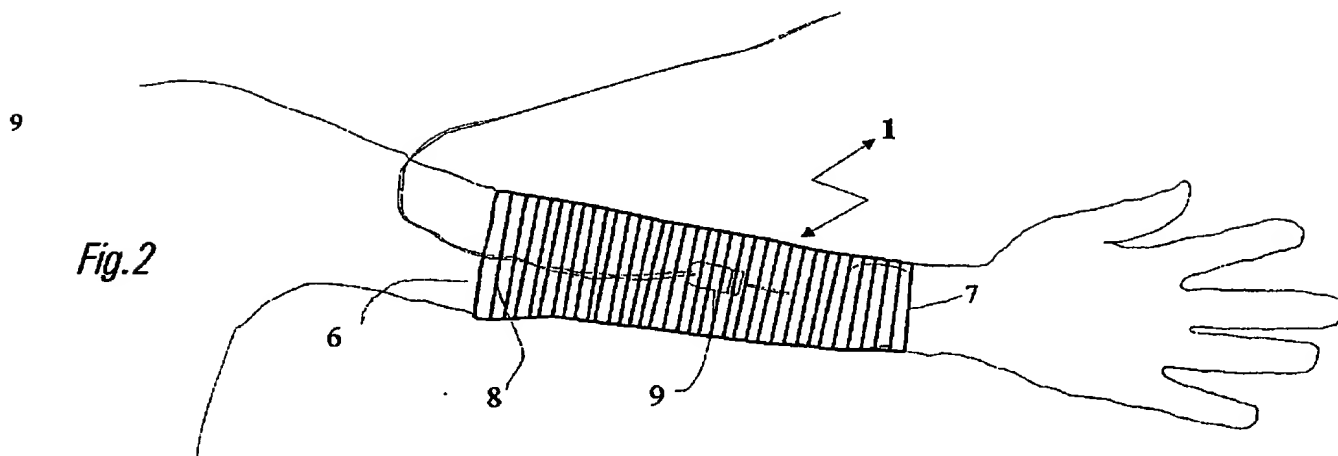
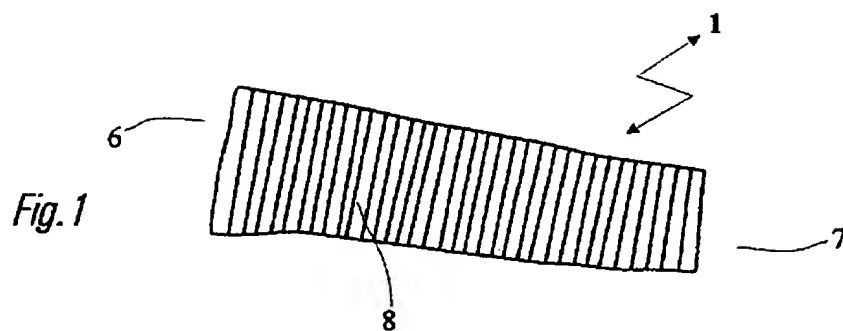
by pinching or collecting ^{new} 2 cm of body 1 material around the entire circumference of the sleeve and then folding and adhering the material back onto the body 1 as shown in Fig. 6 B, C. The band ^{new} 8 doubles the thickness of the sleeves body 1 shown in Fig. 6 C, 10. The band 8 prohibits the sleeve from losing its integrity if punctured or damaged. The elastic body 1 will no longer be able to tear and destroy the integrity of the entire sleeve and site. In storage the sleeve is outwardly rolled upon itself to form a lightweight elastic ring. Method of installation is that of first securing medical site with intravenous medical procedures, cleaning, medications etc. Then stretching the elastic ring over extremity and onto the site to be protected. You then unroll the sleeve body out from itself and onto and over the medical site Fig 2. This finalizes the installation process.

CLAIMS

What is claimed and desired to be secured by the United States letter patent is:

1. A stretchable sleeve apparatus comprising of an elasticized tube body open at both ends configured to have a stretch of at least three times original length and diameter while providing substantial tension throughout its entire length.
2. The sleeve of claim 1 wherein the entire length comprises a plurality of concentrically encompassing elastic bands made from same material.
3. Concentrically encompassing elastic bands in claim 2 that form a permanent part of body claim 1 and are fixed equidistant from each other at a distance of approximately 2.54 cm.

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Fig. 4

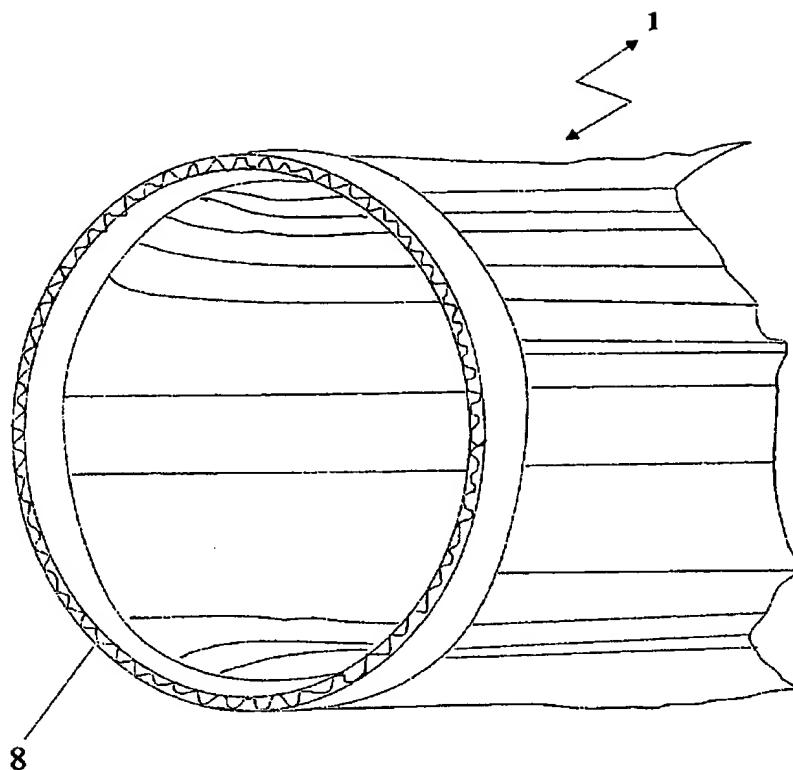
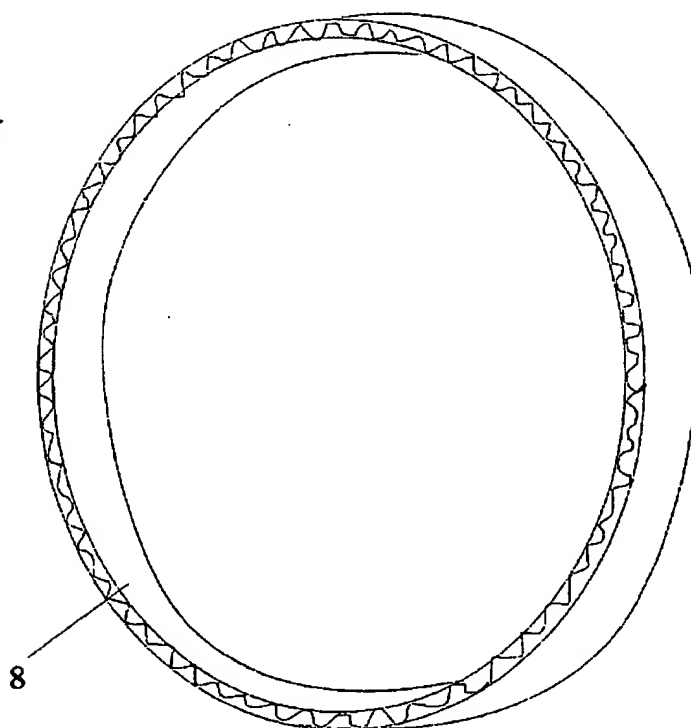


Fig. 5



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Fig. 6 A



Fig. 6 B

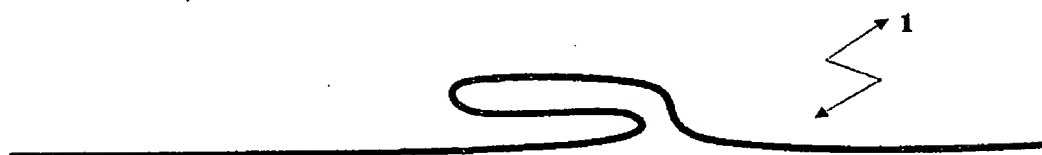


Fig. 6 C

